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REMARKS

Claim 3 has been canceled and rewritten as claim 4. Claims 1, 2 and 4 are under consideration.

The specification has been amended as suggested by the Examiner. In addition, page 2, paragraph [0013] has been amended by inserting the word "belt". Thus, amended, the specification and drawings are consistent so that no drawing change is necessary.

The essence of the invention is a vacuum cleaner brushroll drive which is uniquely characterized by a V-belt having grooves extending lengthwise of the belt with the grooves drivingly engaging a smooth pulley surface on the brushroll. Heretofore, it was thought necessary to have a ribs on the brushroll pulley that interacted with the belt grooves. Applicant discovered that a smooth belt engaging surface surprisingly obtains the same torque as a pulley formed with ribs that interact with the grooves with the drive belt.

Each of the three claims under consideration include the distinguishing limitations of: (1) a belt having grooves that extend lengthwise around the belt, and (2) a pulley having a smooth belt-engaging surface coacting with the belt. None of the references disclose this combination, and, for this reason, the claims are allowable.

Referring specifically to the references, the Williams patent relied on by the Examiner as anticipating the claims was not specifically identified by number, but it is understood to be Patent No. 4,976,003. This patent does not anticipate the

claims because it discloses a timing belt (34) which has ribs extending across rather than lengthwise of the belt. (See Figs. 1, 3 and 4, and col. 4, lines 41-42).

There are important operational distinctions between the timing belt as disclosed by Williams and a V-belt as claimed by Applicant. Applicant's V-belt provides more surface contact with the pulley than a timing belt. As a result, the V-belt will not slip on a smooth pulley in the manner of a timing belt. If the brushroll jams or stalls, as can occur during operation of a vacuum sweeper, a timing belt will slip on the pulley causing damage to the brushroll and/or the motor. With applicant's drive, the V-belt simply stops when jamming occurs. This causes a circuit breaker to stop the motor. Slipping of a timing belt and consequent damage because of a brushroll jam may be one reason why Williams provides a floating brushroll support assembly.

While not relevant to the claims, the Morishita et al. patent is of interest because of its discussion of the problems resulting from jamming or stalling of the brushroll during operation.

Another distinction between the timing belt and applicant's V-belt is that the V-belt is more resilient, since the belt cords are in the backing of the belt. A timing belt, on the other hand, has its cords in the ribs which makes the timing belt stiffer than a V-belt. The relative resiliency of the V-belt contributes to the reduction in slippage.

With further regard to claims 2 and 4, applicant submits, contrary to the Examiner's position, that Williams does not disclose the spindle and pulley as a

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one-piece member. Fig. 1 is only a perspective view. It appears from the detailed view of Fig. 3 that the pulley and spindle are two separate members.

In view of the foregoing, distinctions, the claims are not anticipated by Williams under 35 U.S.C. 102 and should be allowed.

The Lyman and Morishita et al. patents have been considered and are not believed relevant to the claims. As the Examiner notes, Lyman discloses a timing belt that coacts with a toothed pulley on the spindle. The Morishita et al. patent discloses a smooth pulley and a smooth belt.

It is submitted that the application is in condition for allowance and a notification to this effect is solicited.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 35994.

Respectfully submitted,

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